

†9/I

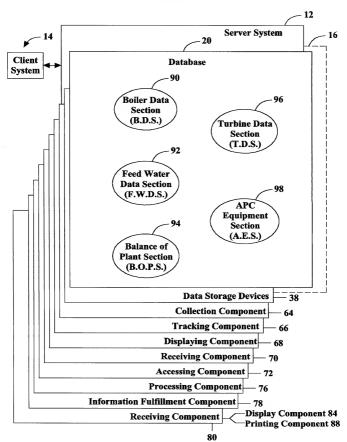
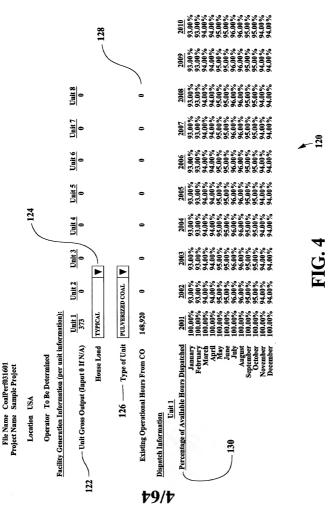


FIG. 3



132

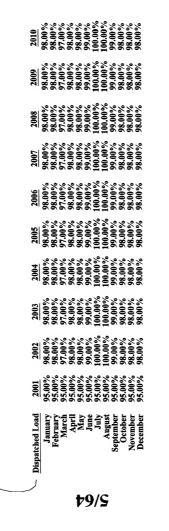


FIG.

<u>~</u>2

	2008 2009	, 93.00%	93.00%	, 94.00%	94.00%	%00%	%00%	%00'96	%00'96	%00%	%00%	94.00%	94.00%	2008	%00%	%00%	%00'/6	%00%	%00%	%00.66	100.00%	100.00%	%00.66	 98.00%	98.00%
	2006 2007		•	•	•	•	•	•	•	•	5	5	5	2006 2007								•			
	2005	_	_	-	_	٠,	_	٠,	٠,	_		•	•	2005								_			
	2004	_	•	٠.	•	_	_	•	۰	5	5	~	<u>.</u>	2004							•				
	2002 2003	5	•	5	5	•	5	•	2	2	9	•	•	2003											
	2001 20	_	_	٠,	_	5	٠.	_	_	_	5	•	٠.	2001 2002							Ξ.	_			
Unit 2	Percentage of Available Hours Dispatched	•	٠,	•	•	•	•	•	•	•	5	9	December 94	Dispatched Load							•				
	Percen											1	Þ	9/	9										

**FIG.** 6

Unit 3	Percentage of Available Hours D												t	9/	′/											
it 3	ble Hours Dispatched	Value	February	March	April	Mav	June	July	Angust	Sentember	October	November	December	Disnatched Load	Tomora	February	March	Anril	May	June	À	August	September	October	November	December
	2001	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	95.00%	%00%	94.00%	94.00%	2001	700000	98.00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%6	%00%	%00%
	2002	93.00%	93.00%	94.00%	94,00%	%00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2002	08 00%	98.00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%0066	%00%	%0086	98.00%
	2003	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00.96	95.00%	95.00%	94.00%	94.00%	2003	% UU 80	%00%	%00.26	%00%	%0086	%00.66	100.00%	100.00%	%00.66	%00.86	<b>38.00%</b>	%00%
	2004	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2004	%00 80	%00%	%00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00.86	%00.86	%00%
	2005	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00.96	95.00%	%0026	94.00%	94.00%	2005	%0086	%00%	%00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00%6
	2006	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	95.00%	%00%	94.00%	94.00%	2006	%00 %6	%00%	97.00%	%00%	%00%	%00.66	100.00%	100.001	%00.66	%00%	%00.86	%00%
	2007	93.00%	93.00%	94.00%	94.00%	<b>32.00%</b>	95.00%	%00.96	%00.96	95.00%	%00%	94.00%	94.00%	2007	98.00%	%00%	%00'26	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00.86	98.00%
	2008	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00.96	95.00%	%00.56	94.00%	94.00%	2008	%00%6	%00%	%00'26	%00.86	%00.86	%00.66	100.00%	100.00%	%00%	%00%	%00%	%00%
	500	93.00%	93.00%	94.00%	94.00%	95.00%	%0026	%00.96	%00.96	95.00%	%00.56	94.00%	94.00%	2009	%00%	%0086	%00'/6	<b>38.00%</b>	%00%	%00.66	100.00%	100.00%	%00.66	%.00% %.00%	98.00%	98.00%
	2010	93.00%	93.00%	94.00%	94.00%	%00%	%00%	%00.96	%00.96	%00%	95.00%	94.00%	94.00%	2010	%00%	%00%	%00.76	%00%	%00.86	%00.66	100.00%	100.00%	99.00%	98.00%	%00%	%.00%

**FIG. 7** 

	2005 2006 2007 2008	93.00% 93.00% 9	93.00% 93.00% 9	94.00% 94.00% 9	94.00% 94.00% 9	95.00% 95.00% 9	95.00% 95.00% 9	96.00% 96.00% 9	96.00% 96.00% 9	95.00% 95.00% 9	95.00% 95.00% 9	94.00% 94.00% 9	94.00% 94.00% 9	2006 2007	%00% 68.00%	%00%6 %00%6	97.00% 97.00%	%00% 68.00%	%00.86 %00.86	%00.66 %00.66	100.00% 100.00% 1	100.00% 100.00% 1	%00.66 %00.66 %00.66 %00.66	%00% <b>68.00</b> %	98.00% 98.00%	%00% 68.00%
	2002 2003 2004	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	6,000%	6,000%	95.00%	95.00%	94.00%	94.00%	2003	%00.86	%00.86	%00%	%00%	%00%	%00'66	100.00%	100.00%	%00.66 %00.66 %00.66	%00%	%00%	%00.86
	d 2001	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	6,000%	6,000%	95.00%	95.00%	94.00%	94.00%	2001	%00%	%00%	%00.26	%00%	%00%	%0066	100.00%	100.00%	%00.66	%00%	%00%	%00%
Unit 4	Percentage of Available Hours Dispatche	Janua	Februa	Mar	Ap	Ÿ	mC Ju		Augu	Septemb	Octob	Novemb	December	Dispatched Load				Ap	Ž	Jul		Augu	Septemb	Octob	Novemb	Decemb

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**FIG. 8** 

Unit 5	Percentage of Available Hours Dispatche									Š		Z	a	Dispatel									ž	i	Z	Q
	ispatched	January	February	March	April	May	June	July	August	eptember	October	ovember	December	hed Load	January	February	March	April	Mav	June	July	August	eptember	October	ovember	ecemper
	2001	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00.96	95.00%	95.00%	94.00%	94.00%	2001	800%	%00%	92.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00'86
	2002	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00.96	95.00%	95.00%	94.00%	94.00%	2002	%00% 6	%00%	%00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00%
	2003	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2003	800%	%00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00.86 8.00%	%.OO.%	%00%
	2004	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	95.00%	95.00%	94.00%	94.00%	2004	%00%	%00%	92.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00%
	2005	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	95.00%	95.00%	94.00%	94.00%	2002	98.00%	%00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00.86 8.00%	%.00%	%00%
	2006	93.00%	93.00%	94.00%	94.00%	%00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2006	%00%	%00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00.86 8.00%	98.00%	%00%
	2007	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00'96	%00%	%00%	94.00%	94.00%	2007	%0086	%00%	%00.26	%00%	800%	%00.66	100.00%	100.00%	%00.66	%00%	%.00%	%00%
	2008	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2008	%00%	%00%	%00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%8.00% 8.00%	98.00%	%00%
	2009	93.00%	93.00%	94.00%	94.00%	%00'56	%00'56	%00.96	%00.96	95.00%	95.00%	94.00%	94.00%	2009	%00%	%00%	97.00%	%00%6	<b>38.00%</b>	%00'66	100.00%	100.00%	%00.66	%00.86 800.86	98.00%	%00%
	2010	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00.96	%00'96	95.00%	95.00%	94.00%	94.00%	2010	98.00%	%00%	%00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	98.00% 8.00%	98.00%	%00.86

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	2010	3.00%	3.00%	4.00%	4.00%	2.00%	2.00%	%00.9	%00.9	2.00%	5.00%	4.00%	4.00%	2010	/0000	2000	2002	%00%	2000	8.00%	3.00 %	%00.00	%00.00	%00.6	8.00%	8.00%	8.00%
	2009		•	•	٥.	9	9	•	<u>.</u>	~	<u> </u>	5	•					90.00%				_	_				•
		9	5	5	5	5	5	5	5	_	5	5	5														
	7008	93.00	93.00	94.00	94.00	95.00	95.00	96.00	96.00	95.00	95.00	94.00	94.00	2008	9	000		% B. 7.6	200	98.00	3	100.00	100.00	99.00	98.00	98.00	98.00
	2007	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	%00%	95.00%	94.00%	94.00%	2007	9	88.00%	%00%	%00.6	%00%	98.00%	%00%	100.00%	100.00%	%00.66	%00%	%00%	%00%
	2006	93.00%	93.00%	94.00%	94.00%	%00%	%00.56	%00'96	%00'96	%00%	%00%	94.00%	94.00%	2006	1000	98.00%	%30.0%	%36%	%30.8%	%00.86	%00.66	100.00%	100.00%	%00.66	%00'86	%00.86	%00%
	2002	93.00%	93.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	95.00%	95.00%	94.00%	94.00%	2005		98.00%	%00%	97.00%	98.00%	%00%	%00.66	100.001	100.00%	%00.66	%00%	%00%	%00'86
	2004	93.00%	93.00%	94.00%	94,00%	95.00%	95.00%	%00'96	%00'96	95.00%	%00%	94.00%	94.00%	2004		98.00%	%00%	97.00%	%.08%	%00.86	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00.86
	2003	93.00%	93.00%	94.00%	94.00%	%00%	95.00%	%00.96	%00.96	95.00%	95.00%	94.00%	94.00%	2003		98.00%	%00.86	%00.2	%00%	%00.86	%00.66	100.00%	100.00%	%00'66	%00%	%00%	%00'86
	2002	93.00%	93.00%	94.00%	94.00%	%00%	%00%	%00.96	%00.96	95.00%	%00%	94.00%	94.00%	2002		%00%	%00%	%00%	%00%	98.00%	%00.66	<b>%00.001</b>	100.00%	%00.66	%00%	%00%	%00.86
	2001	93.00%	93.00%	94.00%	94.00%	%00%	95.00%	%00'96	%00.96	95.00%	%00.56	94.00%	94.00%	2001		%00%	%00%	%00.2	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00%	%00'86
Unit 6	Percentage of Available Hours Dispatched	Tannary	February	March	Anril	May	June	vlul.	Angust	Sentember	October	November	December	Disnatahad I aad	Disparched Load	January	February	March	April	May	June	vlul	August	Sentember	October	November	December
	ntage of A																										
	Perce											t	9	)/(	0	I											

FIG. 10

0100	0107	93.00%	33.00%	94.00%	94.00%	95.00%	95.00%	%00'96	%00'96	%00.56	95.00%	94.00%	94.00%	2010	%00%	%00%	%00.76	%00%	%00%	%00%	100.00%	100.00%	%00%	%8.00%	99,00%	00.00
9000	6007	95.00%	93.00%	94.00%	94.00%	95.00%	%00%	%00'96	%00.96	%00%	%00%	94.00%	94.00%	2009	%00%	%00%	%00'26	%00.86	%00%	%00.66	100.00%	100.00%	%00%	98.00%	98.00%	90.00 / 0
9006	9007	93.00%	93.00%	94.00%	94.00%	%00%	%00%	%00.96	%00'96	95.00%	%00'56	94.00%	94.00%	2008	%00 80	%00%	%00%	%00'86	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%00.86 %00.90	90,00.%
	2002	93.00%	93.00%	94.00%	94.00%	%00%	95.00%	%00.96	%00.96	%00%	%00%	94.00%	94.00%	2007	%00 00	%00%	97.00%	%00%	%00%	%00.66	100.00%	100.00%	%00.66	%00%	%8.00%	98.00%
	7000	93.00%	%00%	94.00%	94.00%	%00 50	%00 50	%00.96	%00.96	%00.56	95.00%	94.00%	94.00%		_				_		_	_			%00%	
;	2002	93.00%	93.00%	94.00%	94 00%	%00.50	06.00	%00 yo	%00.96 00.96	%00%	95.00%	94 00%	94.00%								_	_			%00%	
	200	93.00%	93 00%	94 00%	04 00%	0000	06.000	9,000,00	%00.96	95.00%	95.00%	04 00%	94.00%	2004		% 00 % 00 00 %	92.00%	%00 86	%00%	%00.66	100.00%	100.00%	%00%	%00%	%00%	%00%
	2003	93.00%	03 00%	04 00%	7000	24.00 /0	200.00	% 00 %	%00.06	05.00%	%00%	04 00%	94.00%	2002	SON S	98.00%	90.00%	%00.76	%00%	%00.66	100.00%	100.00%	%00'66	%00%	%00%	%00%
	2002	93.00%	03 00%	93.00 /6	2,00%	94.00%	%3.00%	35.00%	%00.00 06.000%	96.00%	95.00 %	7000	24.00%	2000	7007	%00%	98.00%	9,00%	00.00	%00.06	100 00%	100 00%	%00 66	%00%6	%00%	%00%
	2001	93 00%	2000	93.00%	74.00%	94.00%	95.00%	%00%	96.00%	90.00%	93.00%	0/00070	94.00%									• •			%00%	
Unit 7	Percentage of Available Hours Dispatched	Tonnor	Danuary	repruary	March	April	May	June	Ainf ,	August	September	Conner	November		Dispatched Load	January	February	March	April	INIA	arme	Anonet	Contombor	October	November	December
	Per										ţ	7	9/	Τ	Į											

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2010 93.00% 94.00% 94.00% 95.00% 96.00% 95.00% 94.00%	2010 98.00% 98.00% 97.00% 99.00% 100.00% 99.00% 98.00%
2009 93.00% 94.00% 94.00% 95.00% 96.00% 95.00% 95.00%	2009 98.00% 98.00% 99.00% 99.00% 100.00% 99.00% 98.00% 98.00%
2008 93.00% 94.00% 94.00% 95.00% 95.00% 95.00% 95.00% 95.00%	2008 98.00% 98.00% 98.00% 99.00% 99.00% 99.00% 98.00%
2007 93.00% 93.00% 94.00% 95.00% 95.00% 95.00% 95.00%	2007 98.00% 98.00% 97.00% 98.00% 100.00% 100.00% 99.00% 98.00%
2006 93.00% 94.00% 94.00% 95.00% 95.00% 95.00% 95.00% 95.00%	2006 98.00% 97.00% 97.00% 99.00% 100.00% 190.00% 99.00%
2005 93.00% 94.00% 94.00% 95.00% 96.00% 95.00% 94.00%	2005 98.00% 98.00% 97.00% 99.00% 1100.00% 190.00% 99.00% 98.00%
2004 93.00% 94.00% 95.00% 95.00% 95.00% 95.00% 95.00% 95.00%	2004 98.00% 98.00% 97.00% 99.00% 100.00% 99.00% 98.00%
2003 93.00% 93.00% 94.00% 95.00% 95.00% 95.00% 95.00% 95.00%	2003 98.00% 98.00% 97.00% 99.00% 1100.00% 1100.00% 99.00% 98.00%
2002 93.00% 93.00% 94.00% 95.00% 95.00% 96.00% 95.00% 96.00% 94.00%	2002 98.00% 98.00% 97.00% 99.00% 1100.00% 99.00% 98.00%
2001 93.00% 93.00% 94.00% 95.00% 95.00% 95.00% 95.00% 94.00%	2001 98.00% 98.00% 97.00% 98.00% 99.00% 100.00% 98.00% 98.00%
Unit 8 Percentage of Available Hours Dispatched January February March April May June Superil May June August Superil November November December	Dispatched Load January Redruary Redruary March April
<b>7</b>	9/71

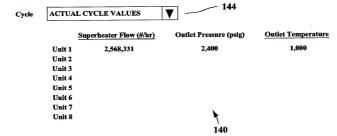
**FIG. 12** 

- 142 Fuels Information: . Moisture & Ash Free Proximate (Sulfur Free) ACTUAL ANALYSIS 74.66% Fixed Carbon 34.00% Carbon 30.70% 5.26% Volatile Matter Hydrogen 29.80% Nitrogen 1.08% Moisture 5.60% Chlorine 0.02% Ash 1.31% Sulfur Oxygen 18.24% Excess Air 20.00% HHV 9.500

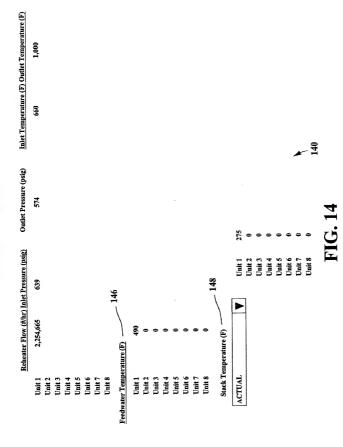
#### Ash Mineral Analysis

Silica - SIO2 31.00% Alumina - Al2O3 14.00% Titania - TI2O3 1.10% Ferric Oxide - Fe2O3 6.60% Lime - CaO 24.60% 6.00% Magnesia - MgO Potassium Oxide - K2O 0.26% Sodium Oxide - Na2O 1.30% Sulfur Trioxide - SO3 12.20% Phosphorous Pentoxide - P2O5 0.70% Undetermined 2.30%

#### Operational Information:



**FIG. 13** 

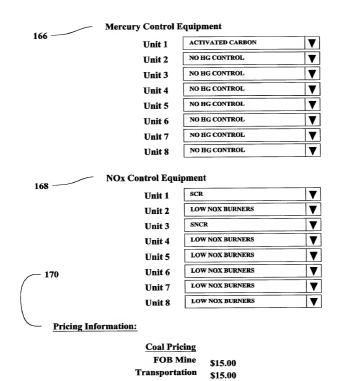


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#### **Facility Equipment Information:** 162 Flyash Control Equipment Unit 1 BAGHOUSE ▼ • ESP Unit 2 BAGHOUSE PLUS GORETEX BAGS Unit 3 Unit 4 ESP ▼ Unit 5 ESP Unit 6 ▼ Unit 7 ESP Unit 8 ESP **SO2 Control Equipment** Unit 1 SCRUBBER LIME NO SO2 EQUIPMENT LIME Unit 2 - 164 Unit 3 DRY INJECTION ▼ LIME ▼ Unit 4 NO SO2 EQUIPMENT LIME Unit 5 NO SO2 EQUIPMENT LIME ▼ NO SO2 EQUIPMENT ▼ Unit 6 LIME Unit 7 NO SO2 EQUIPMENT LIME NO SO2 EQUIPMENT LIME Unit 8 ▼



**FIG. 15** 



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**FIG. 16** 

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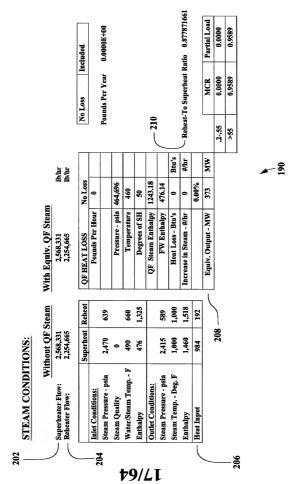


FIG. 17

PREDICTED PERFORMANCE: AVERAGE LOAD	GE LOAD	100%	(MCR)	<del>82.00%</del>		- 7
FUEL Pulverized Coal						ю <b>4</b>
TURBINE STEAM FLOW CORRECTION FACTOR		0.9589		0.9589		<b>10</b>
EVAPORATION Superheater:	lb/hr	2,568,331		2,439,914		۰,
Reheater:	lb/hr	2,254,665	000,	1,000	1 000	. 0
TEMP. AT SUPERHEATER/REHEATER OUTLET	<b>1</b>	1,000	1,000	1,000	1,000	
PRES. AT SUPERHEATER/REHEATER OUTLET	psig	2,400	574	2,400	4/6	, 5
REEDWATER TEMP.	<u> </u>	490		96		3 :
G AIR HEAT	Œ.	275		897		2 1
(uncorr.)		,		9		1 5
AMBIENT AIR TEMP.	<b>[E</b> 4	80		20		3 2
ATR TEMP LEAVING THE AIR HEATER (APPROX)	Ŀ	552		;		: :
EXCESS AIR	pct	20		20	1111	C 7
HEAT LOSS -				,	A I	2 5
DRY GAS	pct	4.36%		4.20%	4.20%	<u> </u>
( 196 H20 & H2 IN FUEL	bet	8.04%		8.02%		9 9
	Set.	0.10%		0.10%		2 6
CARBON	g	0.25%		0.24%	0.20%	3 ;
RADIATION	bet	0.35%		0.33%	0.33%	7 5
MFG. MARGIN	net	1.50%		1.43%	1.43%	2 2
HEAT CREDITS	nct nct	-0.41%		-0.39%		3 :
RIOWDOWN	pct	0.00%		0.00%		\$
TOTAL	bct,	14.19%		13.92%	6.15%	3 %
	•	00.00		%80 98	93.85%	3 23
EFFICIENCY — 198	bet	92.9170				8 8
000						<u>۾</u>
GROSS HEAT FIRED	MM/btu/hr	3,554.99		3,366.55		3
			*	_		
			- 190			

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				_			
	FUEL FIRED PER HOUR	lb/hr		tonnes/hr		tonnes/hr	33
		TPH	209.12	96	198.03	180	33
	AVERAGE LOAD CONDITION DURING AVAILABLE HOURS	%	100.00%		95.00%		Z
	AVAILABLE HOURS		8.256		8,256		32
	FUEL FIRED PER YEAR	t/yr	1,726,472		1,634,955		38
	TOTAL COMBISTION PRODUCTS	lb/hr	3,601,358		3,410,456		8
		ACFM	1,109,079				39
	TOTAL COMBUSTION AIR	lb/hr	3,183,124		3,014,392		<del>\$</del> :
		ACFM	997,176				<del>1</del> 4
	TOTAL ASH (100% 11P)	t/pr	11.50		10.89		43
	TOTAL LIMESTONE (100% 11P)	t/hr	3.10		2,93		4
		t/hr	25.586		24,230		\$
	TOTAL FLYASHLIMESTONE REMOVAL SYSTEM LOADING	t/hr	14.60		13.83		4
					114,152		4
ţ	FLUE GAS TO STACK	lb/hr	3,601,358		3,410,4560		8
79		lb/hr	0		•		<b>\$</b> :
)/							8
6	SOOTBLOWING STEAM	lb/hr	0		0		2
		lb/hr	2,568,331		2,439,914		25
-	POUNDS STM/KW		689				8
	NO. OF UNITS		-				8
							25
	HEAT RATE CALCULATION (APPROX.)						5 26
	Cross Heat Rate (Total Plant):	RTI/KW HR					88
	Net Heat Rate (Turbine Only):	BTU/KW HR					29
	192		BTU/kW HR	kJ/kWh	BTU/kW HR	kJ/kWh	8
	Plant Gross Heat Rate:			10,068	9,513	10,036	6
			ſ	9,310	8,796	9,280	8
	Plant Net Heat Rate: 194	BTU/KW HR	10,098 HHV	10,654	10,066 9.308	10,621	S 2

FIG. 19

<u></u> ₹ §

Unplanned Spare Parts:	8288,639									\$288,639	>
10% of Planned Spares:										002 900	μ
Employee Travel & Relocation:	\$86,300									300,300	<b>S</b> 4
and Services:	\$286,422									\$286,422	Œ
										6361 073	[x
Office/Administration expenses:	\$381,973									CI CHOCO	4
Contract Services: Percent of Annual Labor:	Included										
Ach Dienoes]:		\$1,126,990	80	80	8	80	20	80	8	\$1,126,990	>
Contact and Produ		\$64,716	80	8	8	8	8	8	8	\$84,715	>
	6379 977									776,977	>
S	110000									\$458,866	>
Chemicals:	\$458,866			;	;	ŧ	ę	ę	8	¥	Þ
Coal:		\$48,510,069	3	3	3	3	2	2	3	Andoroio A	•
Limestone:		\$359,458	80	\$0	3	8	8	8	3	\$359,458	>
Purchased Power:		\$212,706	8	8	8	8	8	8	8	\$212,706	>
	\$1,416,663									\$1,416,663	>
Total Operating Budget Case 4											
Taxes Insurance Not Included! Building Data Base	88										
	8									\$0 \$69,780,837	
Grass kW generated Annually		2,921,795,923	0	•	•	•	0	0	•	0 2,921,795,923	1
Cost of Generation:										\$0.0239	
	FI	FIG. 21					7	220			

# O & M Cost Summary For: 2000

				Major	
Direc	t Labor:	Fixed Costs \$6,459,453	Variable Costs	Maintenance	Fuel
Oper	ator's Fees & Services:	\$327,939			
Bonu	s Payments:	\$0			
Home	e Office Technical Support:	\$0			
Warı	ranty Support:	\$0			
Planı	ned Maintenance:			\$4,100,334	
Powe	er Marketing & Resource Management:	\$0			
Unpl	anned Maintenance:			\$410,033	
Plan	ned Spare Parts:				
	vine: Equipment: water System:		\$1,731,661 \$756,330 \$149,151 \$82,661 <u>\$176,591</u> \$2,866,394		

Unplanned Spare Parts:	\$2,886,394

Employee Travel & Relocation: \$86,300

Other Employee Expenses, Fees \$286,422

and Services:

Chemicals:

Office/Administration expenses: \$361,973

Contract Services: Included

 Ash Disposal:
 \$1,126,990

 Start-up Fuel:
 \$84,716

Consumables: \$379,977

Coal: \$46,510,069

Limestone: \$359,458

Purchased Power: \$212,706
Equipment Rental: \$1,418,553

Total Operating Budget | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,00

\$458,886

 13.65%
 10.35%
 8.47%
 8.47%

 Fixed Costs
 Variable Costs
 Maintenance
 Maintenance

 \$0.0033
 \$0.0026
 \$0.0166
 \$0.0166
 \$0.0239

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File Name: CoalPerf031601 Project Name: Sample Project

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		ΜM	MW	MW	M		MW	MW	-	
	Total	352.0 MW	0.00%	Total 373	373				Btu/kWh kJ/kWh	
	Unit 8	0.0	0.00%	010	•	-	010	•	••	
	Unit 7	0.0	0.00%	010	0	1	010	0	• •	
	Unit 6	0.0	0.00%	00	•	-	010	0	• •	
	Unit 5	0.0	0.00%	0	0	1	010	•	• •	
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.0	0.00%	00	0	1	010	•	• •	
	Unit 3	9.0	0.00%	00	0	-	010	•	• •	
	Unit 2	0.0	0.00%	010	-	1	010	•	• •	
	Unit 1	352.0	5.50%	373	373	-	$\frac{0}{373}$	373	10,098	
		tual=2 1	in MW	373		=1	= 7 0 #/hr		BTU/KW HB kJ/kWh	
Operator: 10 be Determined	(per unit information)	Use typical value=1, Actual=2 1	House Load in MW	Total Installed Capacity in MW	Equivalent Gross	Based on Actual Gross Output = 1	based on Equiv. Gross Output = $t$	ulations:	(Full Load Calculated Value) BTU/KW HR 10,698 kJ/kWh 10,654	
	Facility Generation Information (per unit information)	Facility Net Output:	House Load (~5.5%):	Line Losses: Unit Gross Output:		O&M Costs Calculated:	Equiv. Increased MW Output: (Approximate)	Gross Output Used in O&M Calculations:	Unit Net Heat Rate (HHV)	

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FIG. 24

Operational Information For:	2001									
Base O&M Labor Costs On	Unit In Operation Yes=1, No=0	Unit 1	Unit 2 0	Unit 3	Unit 4 0	Unit 5 0	Unit 6 0	Unit 7	Unit 8 0	Total 1
Gross Maximum Capacity Net Maximum Capacity	29866	373 352	0 0	0 0	• •	0		• •	0 0	373 352
Gross Generation (Actual)	Net Capacity Factor Availability Factor Gross Generation (Actual)	89.53% 94.25% 2,921,796	0.00%	0.00%	0.00% 0.00% 0	0.00%	0.00% 0.00% 0	0.00%	0.00%	2,921,796
Period Hours Available Hours Forced Onlage Hours Planned Oulage Hours Maintenance Oulage Hours	ī	2,761,097 8,760 8,256 0 0	• ••••			• ••••		• ••••		2,761,097
Average Load Condition (Gross)	s) MW % Check WW 0.9589	354 89.53% 334 95.00%	0.00% 0.00%	0 0.00% 0 0.00%	0 0.00% 0 0 0.00%	0.00% 0 0 0 0	0.00% 0.00%	0 0.00.0 0 0 0.00.0	0.00% 0 0.00%	MW MW
OF Steam For:  OF Steam Flow (% of MCR) Pounds Der Hour (Average) Pounds Per Year Pressure (psig) Degrees of SH (f) (Input 0 for saturated steam	Pf Steam Flow (% of MCR) ounds Far Hour (Average) unnds ber Year ressure (prigt) gress of SH (P) (Input 0 for saturated steam or input actual degrees of SH)	Unit 1 0% 0 450 50	Unit 2 0% 0 0 450 50	Unit 3 0% 0 0 450 50	Unit 4 0% 0 0 450 50	Unit 5 0% 0 0 450 50	Unit 6 0% 0 0 450 50	Unit 7 0% 0 0 450 50	Unit 8 0% 0 0 450 50	242
Cost Related Information: Escalation Date	6-71	17-Mar-01	36				Ĵ	244		

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Tonne Basis	6.66 7.55 84.00 97.00 121.87% 114.51% 6.66 7.55 8.61 113.36% 114.04%	Ash - Tonne Basis 25.68 26.22 21.35 106.23% 115.61%			
_	\$/ton - FOB Mine per ton per tonne	MM Btu's/ton S/MM Btu's - FOB mine S/MM Btu's - Delivered			
4.00% 01-May-94 \$0.060 147.00 154.00	USB \$15.00 \$15.00 \$30.00	17.00 \$0.88 \$1.76 \$10.00	\$0.00 \$0.00 \$15.00	2 \$0.80	\$0.50
Input for day of the year of work Base composite Index yerial 99.7	Coal FOB mine: Transportation:	LIMESTONE 1 LIME 2	Lime FOB Mine: Transportation: Total:	Oil Cost Per Gallon (Delivered)	NG Cost Per Therm Transportation:
bine Overhaul ed Electricity ment Index CPI C Matt	Exchange Rate (X/USS) Cost per Ton of Fuel (Including trans.)	Disposal Cost per Ton of ASH/Scrubber Sludge Disposal Cost per Ton of ASH/Scrubber Sludge	on Of:		Z
Escalation Rate Last Major Turl Cost of Purchass Location Adjust	Exchange Cost per T	Disposal C	Lime/Limestone Cost per Ton Of:	Start-up Fuel	

**FIG. 26** 

Operator Related Information:         \$0           Operator Fee         \$0           Operator Pouns         \$0           Operator Pouns         \$0           Home Office Tests Support         4           Number of Shifts         0           Unknown-union Facility         10%           Overtime         40%	Type of Boiler Equipment (1 or 2) 1 PULYERIZED COAL 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Unit Design / Commercial Operation Date PC	Flyash Control System	SO2 Control System:         1 NO SO2 EQUIPMENT         3         1         2         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         2         2         2         2	Mercury Control System 1 NO HG CONTROL 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOx Control System
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	-----------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------	--------------------

FIG. 27

	11.0W NOX BURNERS 2 SNCR 3 SCR	6	-	7	-	-	-	-	-	
Cooling Tower: (Yes-1; No=0)	$N_0=0$ )	1	-	1	-	1	-	-	-	
Cycle:	1 ACTUAL CYCLE VALUES 2 STANDARD 1800 PSIG (NON-REHEAT) 3 STANDARD 2400 PSIG (5% OP)	-	-	1	-	-	-	-	-	
Superheater:	(~4,080,000 @ 600 MW) (Input Actual Flow Value if Available)	ailable)								
Rehenter:	Flow without QP hear loss Equiv. QF Steam Increase Equiv. QF Steam Increase Outlet Pressure Outlet Temperature -3,770,000 @ 600 MW Flow without QP hear loss Equiv. QP Steam Increase Total Steam Flow	2,568,331 0 2,568,331 2,400 1,000 0 2,254,665 2,254,665		00000 000	00000 0010	00000 000	00000 0000	0000 000	0000 000	psig deg F
	Intel Fresture (psg.) Intel Temperature (F.) Outlet Pressure (psig.) Outlet Temperature (F.)	639 660 574 1,000	••••	••••						psig psig
Feedwater Temperature		490	0	•	•	0	0	•	0	
Stack Temperature Ambient Temperature Spares Cost	1 ACTUAL 1 2 STANDARD	275 80	• •	• •	• •	• •	0 0	• •	• •	
Fuel Loss during Handling:	SO2 Removal	3% 3%	%0	%0 0	%0	%0 %0	%0 %0	%0 %0	%0 %0	

FIG. 28

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**FIG. 29** 

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FIG. 30

File Name: CoalPerf031601 Project Name: Sample Project

Location: USA

Operator: To Be Determined

1.070 4.00% Escalation Escalation Factor

**Fotal Facility** \$11,832.68 \$12,325.70 \$1,577.69 \$0.00 \$12,076.17 \$21,133.30 \$28,694.24 8986.06 89,057.13 80.00 373 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Unit 7 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Unit 6 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Unit 5 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Unit 4 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 8 0 0 0 0 0 0 0 0 0 Unit 3 90.08 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 Unit 2 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 373 19-Mar-01 \$11,833 \$12,326 \$1,578 \$12,076 \$21,133 \$1,972 Unit 1 \$9,057 \$0 986S Number of Equipment Sets Per Unit

\$86,600.65 2 2 2 2 2 2 3 <u>2</u> \$4,307 \$21,936 \$12,904 \$16,533 \$10,275 \$20,646

> Firing Equipment Misc. Equipment

Heating Surface

Headers

Waterfall

Steel

Development Contingency

Land Options Total Development Costs

Third Party Costs Project Counsel

nternal Costs

Development Costs

Unit Gross Output

Development Fee/Mine Acquisitions/Site

Plant

Site Purchase

Mine Acquisition Costs

Development Fee Pre NTP EPC Cost

Turbine Generators	\$38,324	80	SO.	8	80	8	8	80	\$38,324.29	
BAGHOUSE SCRUBBER	\$7,459	88	8 8	88	88	88	8 8	88	\$7,459.07	
ACTIVATED CARBON	\$419.07	S0.00	80.00	\$0.00	\$0.00	\$0.00	\$0.00	80.00	\$419.07	
SCR	\$37,253	8	8	8	8	8	8	80	\$37,252.60	
Circulating Water System	\$1,275.65	20.00	8 8 8 8	20.00	20.00	20.00	20.00	20.00	\$1,275.65	
Electrical System & Equipment	54.055,520	20.00	80.00	20.00	20.00	20.00	20.00	20.00	\$23,330.45	
ruel Storage & Handling	\$17,662.70	20.00	90.00	20.00	20.00	20.00	80.08	20.00	\$17,662.70	
Intrastructure	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	\$0.00	
Water Treatment	53,132.42	\$0.00	20.00	20.00	\$0.00	20.00	80.00	80.00	\$3,132.42	
Other	\$39,755.15	30.00	20.00	20.00	20.00	20.00	8. 8.	20.00	\$39,755.15	
Misc. Insurance	\$515.62	90.06	20.00	20.00	20.00	20.00	20.0g	8. 8.	\$515.62	
Bollers - not plant related	\$446.53	80.00	80.00	80.00	\$0.00	80.00	80.00	80.00	\$446.53	
Chimneys	\$3,500.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	80.00	80.00	\$3,500.06	
Cooling Towers	\$20,257.85	\$0.00	80.00	80.00	80.00	\$0.00	\$0.00	80.00	\$20,257.85	
Coal Bunkers Land & Buildings	\$1,002.37	<b>80.0</b> 0	20.00	<b>\$0.00</b>	20.00	20.00	20.00	20.00	\$1,002.37	
Buildings Other	\$34,773.70	80.00	\$0.00	80.00	\$0.00	\$0.00	\$0.00	80.00	\$34,773.70	
					;	:	;	:		
EPC Target Total EPC Costs	\$402,046.65	80.00	80.00	S0.08	80.8	S0.00 S0.00	20.00	20.00	\$402,046.65	
Transmission Fees During Construction	\$4,021.87	80.00	\$0.00	80.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,021.87	
Waste Water Pipeline	\$11,189.05	80.00	80.00	\$0.00	\$0.00	80.00	\$0.00	80.00	\$11,189.05	
Management Sevices During Construction										
General & Administrative	\$15,382.48	80.00	80.00	20.00	20.00	80.00	80.00	80.00	\$15,382,48	
Froiestional Services Fractionaries Consultants	52,760.96	0.00	20.00	20.00	0.00	20.00	00.03	80.00	\$2,760.96	
Otilides	\$0.00	80.00	80.00	80.00	80.08	\$0.00 \$0.00	80.00	80.00	\$1,972.11	
Owner's Mobilization G&A	80.00	80.00	80.00	80.00	\$0.00	80.00	\$0.00	80.00	80.00	
Other Owner's Costs	\$2,218.63	80.00	80.00	80.00	\$0.00	\$0.00	\$0.00	80.00	\$2,218.63	
Management Sevices Fee Total Owner's Costs	\$1,725.60	80.08	80.00	S0.00	80.08	80.00 80.00	80.08 80.08	8 8 8 8	\$1,725.60 \$24,059.78	
	(	-								

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58,606.58 \$1,015.64 \$374.70 \$1,563.31 \$5,423.31 \$2,663.35 \$24,440.39	\$8,263.15 \$1,054.09 \$5,180.74 \$0.00 \$1,176.37 \$15,674.35	\$40,204.67 \$0.00 \$0.00 \$1,567.44 \$41,772.10	\$6,409.37 \$8,381.48 \$14,790.85
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00
\$6,606.58 \$1,015.64 \$374.70 \$1,356.81 \$5,423.31 \$9,663.35 \$24,440.39	\$8,263.15 \$1,054.09 \$5,180.74 \$0.00 \$1,176.37 \$15,674.85	\$40,204.67 \$0.00 \$0.00 \$1,567.44 \$41,772.10	\$6,409.37 \$8,381.48 \$14,790.35
O&M Mobilization Labor Fee G&A Plant Consumables Equipment Owners G&A	Infrastructure Costs Roads Community Infrastructure Mine Industrial Area Construction Camp Water Management Total Infrastructure Costs	Owner's Contingency Power Plant EPC Costs Transmission Costs Electrical Interconnection Infrastructure Costs Total Owner's Contingency	Financing Fees/Costs Financial Advisor Upfront Fees
	<b>7</b> 9	33\	

Unit 3

Total Facility 373 \$587,823 \$197

Unit 8 088

Unit 7 - 2 2

Unit 6 - 33

Unit 4 08 08

Unit 2 088

Unit 1 373 \$587,823 \$1,578

Unit Gross Output Total Cost \$/kW Installed

Unit 5 0 \$0 \$0

File Name: CoalPerf031601 Project Name: Sample Project

Location: USA

Operator: To Be Determined

	10 Year Average	\$464	\$790	<u>8</u>	\$310	\$310	298	\$43	\$2	\$13	\$18	\$55	\$2,066	_
Mar-01 Mar-02 Mar-03 Mar-04 Mar-05 Mar-06 Mar-07 Mar-08 Mar-09 Mar-10	10	\$258	\$439	<u>8</u>	\$258	\$258	888	80	80	8	80	80	\$1,301	_
Mar-09	6	\$258	\$439	80	80	80	80	80	80	80	80	0\$	<b>269\$</b>	
Mar-08	00	\$1,290	\$2,193	80	\$1,032	\$1,032	\$177	\$215	80	\$0	80	\$550	\$6,489	
Mar-07	7	\$258	\$439	80	80	8	80	80	\$0	80	0\$	0\$	269\$	
Mar-06	9	\$258	\$439	\$0	\$516	\$516	888	80	\$17	\$132	\$177	08	\$697 \$2,143	
Mar-05	5	\$258	\$439	<b>S</b>	80	80	80	80	80	80	80	08	2698	
Mar-04	4	\$258	\$439	80	80	0\$	S	98	80	B	OS	08	269\$	
Mar-03	67	\$258	\$439	80	<u>8</u>	80	80	0\$	80	08	05	S	2698	
Mar-02	2	\$1.290	\$2,193	80	\$1,032	\$1,032	888	\$215	9	95	9	5	\$5,851	
Mar-01	-	\$258	\$439	S	98	98	5	5	9	5	9	9	\$697	
Date Transfer	(@end of operational year)	Waterwall	Heating Surface	Grates	Pulverizers	Air Pre-Heaters	Enel Handling	Headers	Steel	Belts/Crushers	Casing/Refractory/Ductwork	Chemical Cleaning	Chemical Creaming	

**†9/†**ξ

FIG. 34

300

\$383	\$144	\$153	898	\$132	\$27	\$52	839	\$2	\$264	9	\$49	\$93	\$142	\$117	828	\$479	\$165	898	\$71	8968
98	S	80	<b>20</b>	\$188	8	\$141	<b>S</b>	8	\$329	6	20	<b>8</b> 0	80	\$233	\$117	<b>8</b>	8	98	\$122	\$472
8	80	0\$	80	95	80	80	878	\$38	\$116	1000	\$184	\$310	\$474	80	<b>9</b>	98	\$413	\$122	8	\$535
\$1,916	\$575	99/\$	\$3,267	S	25	98	<b>S</b>	<u>s</u>	80	ě	80	<b>8</b>	80	\$233	\$117	\$1,916	9S	S	\$170	\$2,436
80	0\$	0\$	<b>S</b>	\$407	<u>S</u>	\$125	878	S	\$611		20	<b>8</b>	80	80	8	S	\$413	\$156	S	699\$
95	80	0\$	<b>S</b>	20	\$125	80	80	98	\$125	100	\$164	\$310	\$474	\$233	\$117	<u>8</u>	98	<b>9</b>	\$156	909\$
20	\$287	0\$	\$287	80	98	98	878	S	\$78		20	<u>8</u>	80	20	8	8958	\$206	\$146	8	\$1,310
80	0\$	0\$	S	\$376	95	\$110	98	98	\$485		\$0	<b>S</b>	80	\$233	\$117	0\$	<u>s</u>	8	8	\$489
80	0\$	0\$	80	80	80	80	878	\$13	\$91	, ,	\$164	\$310	\$474	80	80	80	\$206	\$139	80	\$346
\$1,916	\$575	992\$	\$3,257	80	\$141	80	98	98	\$141		80	80	80	\$233	\$117	\$1,916	98	8	\$122	\$2,387
<b>0</b> \$	<b>S</b>	80	<b>S</b> 0	\$344	8	\$141	878	S	\$564	9	20	80	80	80	S	98	\$413	\$122	<b>8</b>	\$535
Turbine (insp/overhaul)	Turbine Values	Generator (inspections)	Sub-Total	Anion Resin	Cation Resin	MB Resin	Carbon Filters	Gravity Filters	Sub-Total	GOLLONG	BAGHOUSE	SCRUBBER	Sub-Total	Electrical	I&C	Power Block	Ash Handling	General	Facilities/Infrastructure	Sub-Total

**†9/SE** 

Total | \$1,795 | \$11,636 | \$1,607 | \$2,364 | \$2,373 | \$3,248 | \$1,877 | \$12,182 | \$1,821 | \$2,101

\$4,100

FIG. 35

### **General Project Information:**

File Name: CoalPerf031601 Project Name: Sample Project

Location: USA

Operator: To Be Determined

## Operator's Fees & Service:

Operator Fee	\$0
Legal Services	\$139,805
Construction Services	\$146,709
Testing Services	\$41,424
total Fees & Services	\$327,939
Travel:	\$86,300
Misc. Employee Expenses	\$286,422

310

File Name: CoalPerf031601 Project Name: Sample Project

Location: USA

Operator: To Be Determined

Sample	Project
--------	---------

### Consumerables:

Lubricating Oils: \$379,977 Hydraulic Oil:

Solvents/Boiler Wash: Cleaning Materials: Welding Supplies:

Nuts/Bolts/Small Mechanical Parts: Fuses/Light Bulb/Small Elect.Parts: Fittings/Small I&E Parts:

Gas & Oil:

Total Oils and Lubricants \$379,977

### Chemicals:

 Boiler Water:
 62.27%
 \$285,603

 Cooling Water:
 36.38%
 \$166,889

 Demin.Regen:
 1.35%
 \$6,194

 Fuel Oil:
 \*\*\*

Fuel Oil: Sanitary: NOx:

Aqueous Ammonia:

Total Chemicals: \$458,686

### Gases:

 Nitrogen:
 \$0

 Hydrogen:
 \$0

 Oxygen/Acetylene:
 \$0

 NOx, CO, SO2, O2 Span Gas:
 \$0

Total Gases: \$0

Office Supplies & Services: Postage, Overnight Mail, etc:	\$17,104
	\$0
Freight:	\$41,038
Telephone: Utilities:	\$9,263
•	\$70.914
Dues, Subscriptions:	
Advertising:	\$0
Camera/Film/Photo Supplies:	\$0
Copier/Paper/Services:	\$0
Offices Supplies:	\$40,194
General Supplies:	\$0
Audio Visual Equipment	\$0
Portable Radios/Services:	\$0
Drinking Water:	\$0
Safety Supplies:	\$0
Safety/Environmental Insp:	\$0
Instrument Service/Repair:	\$0
Vehicles/Service/Repair:	\$165,284
Insurance Autos/Trucks:	\$105,264
Lift Trucks/Service:	
Small Tools:	\$0
Software for Computers:	\$0
Computer Hardware:	\$271
Building Maintenance:	\$0
Janitorial Supplies:	\$4,594
Misc. Expenses:	\$0
Uniforms:	\$13,310
	\$0
Total Supplies and Sarvices	\$361 Q73

### Office Furniture/Rent:

Office Rent:	
Desk/Chairs/etc:	\$(
Lab/Shop/Cntrl. Rm. Equip:	\$(
Computer Lease:	\$(
	\$1

Total Office Furniture: \$0



File Name: CoalPerf031601

Project Name: Sample Project

Location: USA

Operator: To Be Determined

### Rentals/Lease:

Tools:	\$15,304
Equipment:	
Office:	\$261,694
Office Equipment:	\$57,431
Railcar:	\$1,066,871
Lease Auto/Trucks:	\$17,253
Total Rentals:	\$1,418,553

# Planned Spare Parts:

Boiler:		\$1,731,661
Turbine:		\$766,330
APC Equipment:		\$149,151
Feedwater System:		\$62,661
BOP:		\$176,591
	Total Spare Parts:	\$2.886.394

340

File Name: CoalPerf031601

**Project Name: Sample Project** 

Location: USA

Operator: To Be Determined

# **Proximate Analysis:**

FC 33.71% VM 30.44% S 0.85% M 29.55% <u>A</u> 5.45% Total 100.00%

HHV (Btu/#) 8,500

Information used in conjunction with the coal classification figure:

BTU: 8504.98

Dry: 33.70%

**Project Coal Classification:** 

3

Coal Type: Sub-(Calculated) Bituminous

OK

Hardgrove Grind. Index:

### Ash Mineral Analysis:

Silica - SIO2	31.00
Alumina - Al2O3	14.00
Titania - TIO2	1.10
Ferric Oxide - Fe2O3	6.50
Lime - CaO	24.60
Magnesia - MgO	6.00
Potassium Oxide - K2O	0.25
Sodium Oxide - Na2O	1.30
Sulfur Trioxide - SO3	12.20
Phosphorous Pentoxide - P2O5	0.70
Undetermined	2.35
Total	100.00

Total 100.00

Ash Fusion Temperature (Deg. F)
Initial Deformation-Reducing (Input Data)
Initial Deformation-Oxidizing (Input Data)

2189 2239

## PARR Formula Relationships:

### **BASE/ACID RATIO:**

(A range of .4-.7 0.7641

coals and results in low ash-fusibility temps)

IRON/CALCIUM RATIO:

(3-0.3 INDICATIVE 0.26

lowers the fusibility temp. of the ash)

**IRON/DOLOMITE RATIO:** 

(Blt. type ash u: 0.21

SILICA/ALUMINA RATIO:

(above 2.8 & b 2.21

Density #00LF1(2) 0.0446 0.0174 0.0053 0.0911 0.0456 0.0456 0.1966 0.1966 0.1967	
#Cu Ft (2) 0.0846 0.017 0.0744 0.0051 0.0051 0.1966 0.1968 0.1968 0.1968	
BTU's Per Lb Fuel #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #DIVIOT #	
BTU's Per Constit of the Constit of	
#BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01 #BDV/01	
Lb Air Required for Combustion Per Lb Fuel 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Lb Constituent Per Lb Fuel Per Lb Fuel #DNVOI	59708 7144 426.553962 #DIVI01
Molecular  Weight Librio Moles  22.00  22.02  23.03  24.06  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  24.06  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00  20.00	
alysis:  Molecular  Molecular  32.00  44.00  28.08  28.08  34.08  96.03  44.06  72.10  86.12	372.8 32.26 405.06 #DIV/01 #DIV/01 #DIV/01
Gas And	-
Natural Gas Analysis:  Argon A	Flue Gas Weight: #gas/Cu. Ft (gas) GHI to GT (MMBTU) GHI to GT (MMBTU) GHI to GT (MHBTU) GHI to GT (GHI): HHY of Fuel (GTU/Cu. Ft) Cu. Ft of Gas Flod / Hr Lbs. of Gas Flod / Hr Lbs. of Gas Flod / Hr Lbs. of Gas Flod / Hr Total Gas Flow @ 0% EA
<del>†</del> 9/3	<b>7</b> †

**FIG. 42** 

Natural Gas Heating Value Conversion Analysis:	ng Value Conver	sion Analysis:			
17-Mar-01				돭	AH.
			Btu/CF (1)	Comp. Btu	Comp. Btu
Natural Gas Analysis:	sis:	Percent by vol		(68F, 14.70 psia)	(68F, 14.70 psia) (60F, 14.70 psia)
Oxvaen	8	0.00%	•	00'0	0.00
Ardon	<b>A</b>	0.00%	•	000	0.00
Carbon Dioxide	C02	0.00%	•	0.00	0.0
Nitrogen	N2	0.00%	•	0.00	0.00
Hydrogen	72	0.00%	319.4	00'0	0.00
Hydrogen Sulfide	HZS	0.00%	547	0.00	0.00
Methane	CH4	0.00%	994.7	00'0	0.00
Ethane	C2H6	0.00%	1742.6	0.00	0.00
Propane	3H8	%00'0	2480.1	0.00	0.00
Butane	C4H10	%00'0	3215.6	0.00	0.00
Pentane	C5H12	0.00%	3950.2	0.00	0.00
Hexane	C6H14	0.00%	4661,236	0.00	0
Total		0.00%	HHV=	0.00	0.00
				품	H
			Btu/CF (1)	Comp. Btu	Comp. Btu
Natural Gas Analysis:	ßis:	Percent by vol		(68F, 30"WG)	(60F, 30"WG)
Oxygen	8	%000	0	0.0	0.00
Argon	4	0.00%	0	0.00	0.00
Carbon Dioxide	<b>CO</b> 2	0.00%	•	0.00	0.00
Nitrogen	N2	0.00%	•	0.0	0.0
Hydrogen	2	0.00%	270	0.00	0.00
Hydrogen Sulfide		0.00%	595	0.00	0.00
Methane		0.00%	968	0.00	0.0
Ethane	C2H6	0.00%	194.5	0.00	0.00
Propane	C3H8	0.00%	2282.6	0.00	0.00
Butane	C4H10	0.00%	2968.7	0.00	0.0
Pentane	C5H12	0.00%	3654	0.00	0.0
Hexane	C6H14	0.00%	4311.72	0.00	OI,
Total		0.00%	LHV=	0.00	0.00

Notes: (1) Source Mark's Standard Handbook for Mechanical Engineers Ninth Edition Page 4-29 FIG.~43

HHV/LHV Ratio #DIV/01

Southern Fuels				. 0	15.999	- 2 - 8	31.999 84.063	90.0	50.05%	
Southern Fuels			S02 O	SO2 Offset Cost Assumption	nption \$150.00	\$/Ton				
						@ 1.2 lbs SO2/million BTU	se UBTU			
Averag Mines Col	Average BTU/lb Content	Average Percent Sulfur (S%)	Average Ash Content (S%)	Average Ash Content in Compliance (S%) (Y/N)*	8 % allowed for Ibs SO2/MM Compliance Btu	lbs SO2/MM Btu	SO2 Reduction Efficiency	SO2 Reduction lbs SO2/MM Efficiency Btu	Required Offsets Tons SO2/Ton Coal Fired	Cost of Offsets \$/Ton of Coal Fired
Balley 12	12,950	2.14%	7.50%	z	0.778%	3.3	10.00%	2.97	0.038462	\$5.769
Colonial	12,800	0.93%	8.88%	z	0.769%	1.45	0.00%	1.45	0.018560	\$2.784
Whitetail 12	12,800	1.60%	8.25%	z	0.769%	2.5	0.00%	2.50	0.032000	\$4.800
Juliana	12,900	1.29%	9.75%	z	0.775%	7	%00.0	2.00	0.025800	\$3.870
Sawmill 12,	12,900	1.29%	9.75%	z	0.775%	8	0.00%	2.00	0.025800	\$3.870
Sentenial 12,	12,900	1.29%	9.75%	z	0.775%	8	0.00%	2.00	0.025800	\$3.870
Winifrede 12	12,800	0.93%	9.25%	z	0.769%	1.45	0.00%	1.45	0.018560	\$2.784

FIG. 44

41907.04

	Project In	Project Info. Check					
	i	2	Tons Fired	BBtu	SO2 (tons)	S (tons)	s%
I		150	756,000	12,929	11,500	5,756	0.76%
i i		100	756,000	12,929	13,510	6,762	0.89%
Unit 3	-	8,551	2,264,000	12,861 38,719	12,220 37,230	6,116 18,534	0.81%
_	Project In	Project Info. Check					
	Î	≥	Tons Fired	BBtu	SO2 (tons)	S (tons)	s%
Ü		<u> </u>	2,272,000	38,856	11,500	5,756	0.25%
Unit 2	_	3,551	2,338,000	39,984	13,510	6,762	0.29%
			4.610.000	78.840	25.010	12,518	

	tons of Offset Required 10,968 #NUMI #NUMI
	SO2 (1.2#/MMBtu) Allowable Tons Allowable Tons #6.493 #NUMI
	#SO2/MMBtu 2.00 #NUMI #NUMI
	SOZ (tons)#SC 27,481 #NUM! # #NUM! #
	Sulfur (tons) 13,745 #NUMI #NUMI #NUMI
Bituminous	MMBtu 27,489,039 #NUMI #NUMI #NUMI
Sub- Bitum	Tons Fired 1,617,002 #NUMI #NUMI #NUMI
	%S 0.85% 0.85% 0.85%
formation:	HHV 8,500 8,500 8,500
culated In	Unit 1 Unit 2 Unit 3
Cal	Project:

**FIG. 45** 

# O & M Labor, Purchased Power And Fuel Calculations

	File Name: CoalPerf031601 roject Name: Sample Project	
GENERAL PROJECT INFORMATION:	File Name: Project Name:	

Location: USA

Operator: To Be Determined

ANNUAL INFLATION RATE (to present day) 4.0%
BASE DATE 22-Aug-93
ESCALATION DATE 17-Mar-01 Part Year Esc. Factor 1.00

ADJUSTMENT #DIV/01 147.44% 156.03% PROJECT 144 154 154 PROJECT 99.7 MODEL Being Updated Zip Code to be used to identify location COMPOST ADJUSTMENT MATERIAL LABOR

**BASE INDEX** 

CAPACITY (MW): 373 1.00 Average Unit Size Multiple Unit Labor Multiplier Total Installed MW Number of Units

SYSTEM: POWER BLOCK

LABOR SUMMARY (ADJUSTED FOR LOCATION)

Exchange Rate 1 4 Operations and Maintenance NUMBER OF SHIFTS 1 Administration

FIG. 46

141,321 122,478 113,057	103,538 64,689 120,715 94,847 129,337	150,743 379,389 1,420,192	455,997	373,088 829,085 275,919 224,185 224,185	413,879 310,409 241,429 482,859 827,758	413,879 310,409 413,879 827,758	82,850.76 82,850.54
ANNUAL LABOR COST \$141,321 \$122,478 \$113,657 \$113,657	\$120,715 \$120,715 \$129,337	\$150,743 \$379,389 \$1,420,192	ANNUAL COST \$455,997 \$414,542	\$373,088 \$829,085 \$275,919 \$224,185	\$413,879 \$310,409 \$241,429 \$482,859 \$827,758	\$413,879 \$310,409 \$413,879 \$827,758 \$7,039,261	\$62,850.76 \$62,850.54 Corrected \$8,459,453 102 \$82,938
ANNUAL Wage with Fringes per Employee 18141,321 \$112,478 \$112,478	\$47,424 \$43,112	\$75,371 \$47,424 sin. Labor	- <del>-</del> -	\$93,272 \$103,636 \$68,980 \$56,046 \$58,046	\$103,407 \$77,802 \$60,357 \$60,357 \$103,470	\$103,470 \$77,802 \$103,470 \$103,470	Uncorrected \$8,459,453 102 \$82,938
FRINGES 40% 40% 40%	404 40% 40% 80%	40% \$75,371 40% \$47,424 Total Admin. Labor	FRINGES 40% 40%	40% 40% 40% 40%	64 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	40% 40% 40% 5 M PLANT	LABOR: STAFF:
ANNUAL Wage with 0.T. per \$100,944 \$87,485 \$80,755	\$46,192 \$43,112 \$33,874 \$30,795	\$53,837 \$33,874	ANNUAL Wage with 0.T. per Employee \$81,428	\$66,623 \$74,025 \$49,271 \$40,033	\$73,907 \$65,430 \$43,112 \$43,112 \$73,907	\$73,907 40% \$103,47 \$55,430 40% \$17,802 \$73,907 40% \$103,47 \$73,907 40% \$103,47 \$10B-TOTAL, O & M PLANT LABOR:	re1, no=0 0 TOTAL DIRECT LABOR TOTAL PLANT STAFF.
ANNUAL WAGE For Employoe \$100,944 \$87,485 \$90,755	\$74,025 \$41,993 \$39,193 \$30,795 \$27,995	\$53,837 \$30,795	ANNUAL WAGE \$74,025 \$87,298	\$60,566 \$87,298 \$44,792 \$36,394 \$36,394	\$67,188 \$50,391 \$39,193 \$39,193 \$67,188	\$67,188 \$50,391 \$67,188 \$87,188	rements yes=1, no=0 0 1 TOTAL DIRECT LABOR: TOTAL PLANT STAFF: AVERAGE COST PER EMPLOYEE:
OVERTIME 10.0% 10.0% 10.0%	10.0% 10.0% 10.0%	10.0%	OVERTIME 10% 10%	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$\$\$\$\$	5555 5333	al labor require $m{47}^{'}$
OVERTIME  (YES=1/NO=0)  0  0	·	o <del>c</del>	OVERTIME (YES=1/NO=0) 1				Adjusted for local labor requirements years, noted $\Gamma$ TOTAL DI TOTAL DE $\Gamma$ AVERAGE COST PER
HOURLY WAGE N/A N/A N/A	\$18.34 \$14.81 \$13.46	N/A \$14.81	WAGE NIA NIA	N/A N/A \$21.50 \$17.50	\$32.30 \$24.23 \$18.84 \$18.84 \$32.30	\$32.30 \$24.23 \$32.30 \$32.30	
NUMBER OF EMPLOYEES HOURLY PER POSITION WAGE 1 NA 1 NA 1 NA		୯୭ ଅ	NUMBER OF EMPLOYEES HOURLY PER POSITION WAGE 4 NA	4 00 4 4 4 1 12	44400 8	4 4 4 8 0 0	
NUMBER OF SHIFT(S) 1		4	NUMBER OF SHIFT(S) 4 4	4444	44444	4444	
NUMBER PER SHIFT		£ 4	NUMBER PER SHIFT 1 OR 1	- 4	aa		
ADMINISTRATIVE: PLANT MANAGER OPERATIONS MANAGER MANTERENITE MANAGER	PLAN INCESUL IS MANAGER OFFICE MANAGER ACCOUNT CLERK SECRETARY	PLANT/RESULTS ENGINEER STOCK CLERK SUB-TOTAL	NU OPERATIONS: PEE SHIFT SUPERVISOR CONTROL ROOM OPERATOR	CHEMIST APC EQUIP. OPERATOR ROVER SWEEPERIOPERATOR FRONT-END LOADER	MECHANICS MECHANICS HELPERS TRUCK DRIVERS ASHLAPC SLUDGE MOVER APC MECHANICS	ELECTRICIANS ELECTRICIANS HELPERS INSTRUMENT TECH'S APC I & C	SUB-TOTAL 80
			t	79/Lt			

FIG. 47

III. REPLACEMENT RESERVE

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WATER & SEWER	Not Including Building Data Base	À	200	TSOS	
	WATER	#REF1	#EF-	#REF1	
	SEWER		#REF1	#REF1	
				#REF1	(1993\$)
	101	TOTAL WATER & SEWER	VER	#REF1	(1996\$)
INSURANCE	POLICIES		APPRO	APPROXIMATION	
	1. ALL RISK POLICY (\$90 MILLION)			\$205,035	
	BUSINESS INTERRUPTION (\$15 MILLION)	ILLION)		\$80,406	
	3. THIRD PARTY LIABILITY			\$250,000	
	4 POLLUTION LIABILITY (\$1 MILLION)	ê		\$50,000	
		TOTAL INSURANCE	ANCE	\$	(1993\$)
				\$	

t9/8t

DIECHASED DOWER	L TIND	UNIT 2	UNIT 3	4 LINO	CNIT 5	ONIT 6	CNIT 4
HOUSE LOAD	2.50%	%00.0	%00.0	%00.0	%00.0	0.00%	%00.0
HOUSE LOAD-KW	20,489	•	0	•	•	•	•
HOURS PER YEAR OFF LINE	916.8	0	0	•	0	•	0
% OF HOUSE I OAD PURCHASED	40%	%0	%0	%0	%0	%	%0
TSCC BENCA	0.06	•	•	•	0	•	•
FLECTRIC COST	\$112,706	S	S	\$	<b>\$</b>	<b>\$</b>	\$
DEMAND CHARGE	\$100,000	읈	80	8	8	8	S
TOTAL ELECTRICITY COST	\$212,706	9	9	\$	\$	<b>%</b>	0\$

0.00% 0 0 0 0% \$0 \$0

FIG. 48

UNIT 6 0 0 #NUMI #NUMI #NUMI	#NOM	#NOM
UNIT 5 0 0 #NUMI #NUMI 4 4	#NOM!	#NOM!
UNIT 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	#NOM#	#NOM#
UNIT 3 0 0 0 0 8 NUMI #NUMI #NUMI #NUMI	#NOM	#NOM
UNIT 2 0 0 0 0 1 WNUMI WNUMI	#NOM!	#NOM!
21 7 7 3555 533.25 4 4 14,931	14,931	\$29,862 \$84,715 105,893
9.484614489 PEPROXIMATE DAYS OFF LINE  UNMER OF STARTS PER YEAR (AVG. 3 DAY Outage) BROSS HEAT INPUT OF UNIT (MILLION BTU'S PER HOUR) HI OF STARTS-UP BUNNERS-15% of GHI (MILLION BTU'S PER HOUR) WERAGE LENOTH OF START-UP (HOURS)	D FOR START-UP	\$0.20 per Therm \$0.80 per Gallon Gallons
START-UP FUEL 9.484614489 AUMBER OF START'S PER YEAR (AVG. 3 DAY Outage) GROSS HEAT INPUT OF UNIT (MILLION BTU'S PER HOUR) AUFFACH OF START-UP BUNNERS-15% of GH (MILLION BTU'S INPUT OF START-UP (HOURS) HEAT INPUT FROM START-UP (HOURS)	TOTAL MILLION BTU'S REQUIRED FOR START-UP	NATURAL GAS REQUIRED @ OIL REQUIRED @
Þ	9/	6 <b>†</b>

UNIT 8 0 0 0 0 0 0 0 0 0 0 4 #NUMI #NUMI

UNIT 7 0 0 #NUMI #NUMI #NUMI

#NOM

#NOM #NOW

Facility C \$1,899,240 WHEELING COST

NOT INCLUDED IN ESTIMATE

REAL ESTATE TAXES

2.603019553 Facility D \$3,311,600 1.75198561 Calculated Value: FIG. 49

Flow Rates This tab is being used to adjust variations in heat rate at partial loads in the

Superheater Reheater Gen-KW	1,025,000 900,000 156,200	Minister of Perdunder Headers	Number of Feedwater Heaters:									
		72%	2906	9414	9715	9866	10194	10395	10575			
		20%	8227	8395	8584	8757	8917	9062	9202	9334	9460	
		75%	8016	8073	8177	8302	8427	8543	8653	8757	8857	
•		400%	8000	8009	8029	8136	8230	8330				
		WO	8003	8017	8061	8132	8225	8328	8433	8532	8629	
	26	WO-OP	7993	7995	8032	8095	8181	8275	8376	8472	8566	
<del>g</del>	ŧ	EXH Pres	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	2.0	
the mo	TC2F Lengt	EX		7993	7995	8032	8095	8181	8275	8376	8472	8566
tion of			7746	7897	7995	8069	8129	8181	8226	8264	8299	8331
performance section of the mode	%	Change	-3.12%	-1.22%	0.00%	0.93%	1.68%	2.33%	2.89%	3.36%	3.80%	4.20%
perforn	Exhaust	Pressure	0.5	-	1.5	8	2.5	က	3.5	4	4.5	10

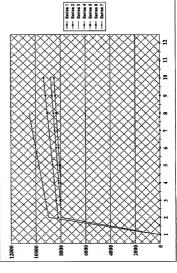


FIG. 50

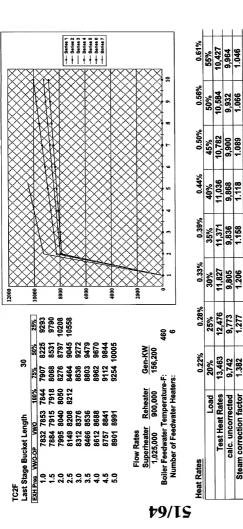


FIG. 51

10,225 10,143

9.994

9,650

1.05% 1.05759072

1.06780975 0.50%

1.07802877 -1.03%

1.0882478

1.10868585 1.09846682

1.1291239 1.11890487

-2.77%

-5.24%

-8.80%

22%

20%

45%

40%

35%

30%

25%

**50%** 

Check

200MW Tandem Compound 350MW Tandem Compound **400MW Tandem Compound 600MW Tandem Compound** 

8,523

8,712 8.500

8.767

1.17%	105%	9,823	10,300	0.954	0.95540047	0.18%	105%	8,010	2,906	7,911	7,848
1.11%	100%	9,844	10,266	0.959	0.9656195	0.70%	100%	8,036	7,955	7,964	7,872
1.06%	92%	9,870	10,231	996'0	975	1.14%	95%				
1.00%	%06	9,902	10,197	0.971	0.9860	1.52%	%06				
0.94%	85%	9,941	10,163		0.99627657	1.82%	85%				
0.89%	%08	9,988	10,130	9860	1.0064956	2.04%	80%				
0.83%	75%	10.045	10,096	0.995	1.01671462	2.14%	75%	8.133	8.189	8.210	8,009
0.78%	%02	10.114	10,063	1.005	7	2.13%	%02				
0.72%	65%	10.198	10.030	1.017	1.03715267	1.97%	65%				
0.67%	%09	10.301	9.997	1.030	<b></b>	1.62%	%09				
	-	1-	1	1	t	9/	<b>⊢</b> ′ <b>7</b> :	5	+-	1	1

**FIG. 52** 

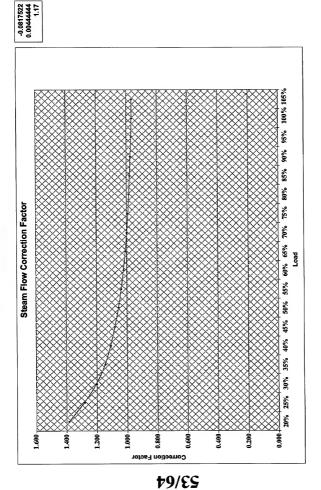


FIG. 53

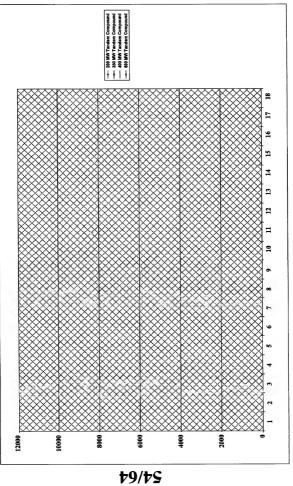


FIG. 5

File Name:	File Name: CoalPerf031601 Project Name: Sample Project	IE Dispatch Information:	For Reference Only	nce Only							
		- franch - GRande	2001	2002	2003	2004	2005	2006	2007	2008	2009
Location: USA	NSA	Capacity Factor	83.70%	85.00%	71.30%	%09.69	67.50%	68.10%	67.10%	58.00%	67.30%
		Calculated Capacity Factor	89.53%	20.00	9/./8%	88.03%	000,000	00.70	700000	%00 00	07.10% 00.00%
Operator	Operator: To Be Determined	Availability	90.00%	90.00%	90.00%	77.33%	75.00%	75.67%	74.56%	75.56%	75.44%
		Hours in Years	8 760	8.760	8.784	8.760	8.760	8.760	8,760	8,760	8,760
		Hours Disnatched	7,884	7.884	2,906	7,884	7.884	7,884	7,884	7,884	7,884
		Annual Output 2,731,405	2.731,405	2,773,829	2,33,127		2,202,746	2,222,326	2,195,692	2,219,063	2,215,800
		Calculated Annual Output	2,921,796	2,515,870	2,864,503	2,872,651	2,864,503	2,864,503	2,864,503	2,524,019	2,864,503
		Major Outages		-						-	
		Hours Available for Dispatched	2001	2002	2003	2004	2005	2006	2007	2008	2009
		January	4	44	4	744	744	4	4	44	4
		February	672	672	672	672	672	672	672	672	672
		March	240	240	8	8	8	8	5 5 6	<del>2</del> 5	240
		April	2	720	2 ;	8	3;	3 3	27.	87	24.
		May	<b>4</b> 5	<b>4</b> 5	\$ 5	ŧ 5	ŧ 5	£ 5	1 2	22	250
		auno	37	244	747	747	744	14	4	744	4
1		VIDE Sending	1 2	į	1	1	1	1	\$	1	4
<u>ځ</u>		Sentember	120	720	720	720	720	720	720	720	720
9		October	1	0	¥	44	744	4	744	•	44
1		November	20	456	720	720	720	720	720	456	720
S		December	\$	744	4	744	744	7	44	744	¥
S		Total	8258	7248	8258	8280	8256	8256	8226	8258	8256
		Hours Dispatched	2001	2002	2003	2004	2005	2006	2007	2008	5008
		January	1	692	692	692	692	692	692	692	692
		February	672	625	625	647	625	629	625	647	625
		March	240	226	226	226	226	526	226	226	528
		April	720	677	119	677	677	677	677	677	229
		May	<u>¥</u>	707	2	707	707	202	20.0	è	6 5
		Pune	720	684	684	684	684	489	989	4 2 2	1 2
		Viuc .	4	4.	4 :	ŧ.	1				1 7
		August	<b>1</b>	45.	Ė	417	4.0	100	44	684	684
		September	3 5	ģ	\$ 6	102	102	5 6	202	} -	202
		Nonember	Ę	430	į,	677	429	67	229	429	677
		November	27.7	900	9	909	9	009	669	689	689
		Total Hours Disnatched	1 2	685	6851	7828	280	18	100	6873	780
		Percentage of Available Hours	100.00%	94.52%	94.54%	94.54%	94.54%	94.54%	94.54%	94.51%	94.54%
		Percentage of Annual Hours	94.25%	78.20%	89.10%	89.1%	89.10%	89.10%	89.10%	78.24%	89.10%
		Average Annual Load	95.00%	98.58%	98.51%	98.51%	98.51%	98.51%	98.51%	98.58%	98.51%
				(							
			<b>T</b>	۲	Y						
			=		3						

**†9/SS** 

Column   C						74	LI					
2011         2012         2014         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< th=""><th>98.51</th><th>98.58%</th><th>98.51%</th><th>98.51%</th><th>98.51%</th><th>98.51%</th><th>98.51%</th><th>98.58%</th><th>98.51%</th><th>98.51%</th><th>98.51%</th><th>98.51%</th></th<>	98.51	98.58%	98.51%	98.51%	98.51%	98.51%	98.51%	98.58%	98.51%	98.51%	98.51%	98.51%
2011         2012         2013         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019 <th< td=""><th>89.10</th><td>78.24%</td><td>89.10%</td><td>89.10%</td><td>89.10%</td><td>89.11%</td><td>89.10%</td><td>78.20%</td><td>89.10%</td><td>89.11%</td><td>89.10%</td><td>89.10%</td></th<>	89.10	78.24%	89.10%	89.10%	89.10%	89.11%	89.10%	78.20%	89.10%	89.11%	89.10%	89.10%
Column   C	94.54	94.51%	94.54%	94.54%	94.54%	94.54%	94.54%	94.52%	94.54%	94.54%	94.54%	94.54%
2011         2012         2014         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2016         2017         2019         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010 <th< td=""><th>12</th><td>6873</td><td>7806</td><td>18 18 18 18 18 18 18 18 18 18 18 18 18 1</td><td>286 88</td><td>7828 28</td><td>780g 280g</td><td>6851</td><td>2808</td><td>7828</td><td>2808</td><td>2806</td></th<>	12	6873	7806	18 18 18 18 18 18 18 18 18 18 18 18 18 1	286 88	7828 28	780g 280g	6851	2808	7828	2808	2806
2011         2012         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< td=""><th>200</th><td>629</td><td>229</td><td>677</td><td>677</td><td>677</td><td>677</td><td>429</td><td>677</td><td>677</td><td>229</td><td>417</td></th<>	200	629	229	677	677	677	677	429	677	677	229	417
2011         2012         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< td=""><th>20</th><td>0</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>•</td><td>707</td><td>707</td><td>707</td><td>707</td></th<>	20	0	707	707	707	707	707	•	707	707	707	707
2011         2012         2013         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< td=""><th>884</th><td>884</td><td>684</td><td>684</td><td>684</td><td>684</td><td>684</td><td>684</td><td>884</td><td>684</td><td>884</td><td>884</td></th<>	884	884	684	684	684	684	684	684	884	684	884	884
2011         2012         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< td=""><th>74</th><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td></th<>	74	714	714	714	714	714	714	714	714	714	714	714
2011         2012         2013         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2016         2017         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010         2010 <th< td=""><th>74</th><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td><td>714</td></th<>	74	714	714	714	714	714	714	714	714	714	714	714
Column   C	684	684	684	684	684	684	684	684	884	684	88	884
2011         2012         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014         2014 <th< td=""><th>707</th><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td><td>707</td></th<>	707	707	707	707	707	707	707	707	707	707	707	707
2011         2012         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2019         2020         64.20%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%	677	677	677	21.2	677	119	411	677	677	677	677	229
2011         2012         2013         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2016         2017         2017         65.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%	526	226	226	226	226	226	226	228	228	228	228	228
Column   C	625	647	625	625	625	647	625	625	625	647	625	625
2011         2012         2014         2015         2014         2015         2014         2015         2014         2015         2014         2015         2019         2020         68.20%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%	202	20 <u>20</u>	2019 882	2018	2017	2018	2002	2014	2013 2013	2012	2011	2010
2011   2012   2013   2014   2015   2016   2017   2018   2019   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020	20	717	0070	9679	9530	979	9779	842/	87288	8280	8228	8226
The color	¥ 8	<u>*</u>	<b>4</b>	¥	<u>\$</u>	¥	¥	4	<u>¥</u>	¥	7	4
2011         2012         2013         2014         2015         2014         2015         2014         2015         2014         2015         2019         2020         68.20%         67.10%         68.00%         67.10%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20% <th>720</th> <td>456</td> <td>720</td> <td>720</td> <td>720</td> <td>720</td> <td>720</td> <td>456</td> <td>720</td> <td>720</td> <td>720</td> <td>720</td>	720	456	720	720	720	720	720	456	720	720	720	720
2011         2012         2014         2014         2015         2014         2015         2014         2015         2019         2019         2019         2019         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020 <th< td=""><th><u>¥</u></th><td>0</td><td>74</td><td>44</td><td>44</td><td>44</td><td>744</td><td>0</td><td>4</td><td>4</td><td>4</td><td>4</td></th<>	<u>¥</u>	0	74	44	44	44	744	0	4	4	4	4
2011         2012         2013         2014         2015         2014         2015         2014         2015         2019         2020         2020         68.20%         67.10%         68.00%         67.10%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%<	720	720	720	720	720	720	720	720	720	720	720	720
2011         2012         2014         2014         2015         2014         2015         2014         2015         2019         2019         2019         2010         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020         2020 <th< td=""><th>4</th><td>4</td><td>744</td><td>4</td><td>4</td><td>744</td><td>744</td><td>4</td><td>4</td><td>744</td><td>1</td><td>744</td></th<>	4	4	744	4	4	744	744	4	4	744	1	744
2011   2012   2013   2014   2015   2016   2017   2018   2010   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020	4	744	744	744	744	744	744	744	747	2 2	277	744
2011         2012         2014         2014         2015         2014         2015         2014         2015         2019         2019         2020           04.30%         81.70%         61.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         74.80%         74.80%         74.80%         74.80%         74.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%         77.80%	720	20	2 3	2 2	5 5	£ 5	£ 5	ŧ 5	ŧ 5	‡ £	\$ 5	ŧ.
2011         2012         2013         2014         2015         2016         2017         2018         2019         2020           08.20%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00%         67.00% </td <th>744</th> <td>744</td> <td>744</td> <td>744</td> <td>2 5</td> <td>3 2</td> <td>3 2</td> <td>277</td> <td>9 :</td> <td>3;</td> <td>3 ;</td> <td>9 ;</td>	744	744	744	744	2 5	3 2	3 2	277	9 :	3;	3 ;	9 ;
2011         2012         2013         2014         2015         2014         2015         2014         2015         2019         2020         2020         68.20%         67.10%         68.00%         67.10%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%         67.20%<	1 2	9 5	3 5	3 5	<del>2</del> 5	2 5	<b>2</b> 5	2 5	2 50	5 <del>5</del> 6	540	240
2011   2012   2013   2014   2015   2016   2017   2016   2017   2018   2010   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020   2020	672	672	672	672	672	698	672	672	672	672	672	672
2011         2012         2013         2014         2015         2016         2017         2018         2019         2020           08.35%, 81.0%         81.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         61.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         60.0%         80.0%         81.0         81.0         81.0         81.0         81.0         81.0         81.0         81.0         81.0         81.0	4	<del>1</del>	4	4	4	4	4	74	44	744	744	447
2011         2012         2013         2014         2015         2016         2017         2018         2019           8.27.78%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.30%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%         74.47%         74.70%         74.70%         74.67%         74.70%         74.67%         74.70%         74.67%         74.70%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.67%         74.6	202	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
2011         2012         2013         2014         2015         2016         2017         2018         2019           64.20%         67.30%         67.10%         67.10%         67.10%         67.10%         67.10%         67.10%           64.77.8%         67.77%         67.70%         67.70%         67.70%         67.70%         67.70%           75.78%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%           75.72%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%           75.72%         67.70%         67.70%         67.70%         67.70%         67.70%         67.70%           75.72%         75.70%         67.70%         67.70%         74.60%         74.70%         74.70%           75.72%         75.70%         75.70         74.60%         74.60%         74.70%         74.70%           7.00         75.70         75.70         75.70         75.70         75.70         75.70           7.00         7.60         7.60         7.70         75.00         77.80         75.00         75.70           7.50         7.50         7.60         7.50         7.60 </td <th></th> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td>		-						-				
2011         2012         2013         2014         2014         2015         2016         2017         2018         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019 <th< td=""><th></th><td>2,524,019</td><td>2,864,503</td><td>2,864,503</td><td>2,864,503</td><td>2,872,651</td><td>2,864,503</td><td>2,515,870</td><td>2,864,503</td><td>2,872,651</td><td>2,864,503</td><td>2,864,503</td></th<>		2,524,019	2,864,503	2,864,503	2,864,503	2,872,651	2,864,503	2,515,870	2,864,503	2,872,651	2,864,503	2,864,503
2011         2012         2013         2014         2015         2016         2017         2018         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019 <th< td=""><th></th><td>2,199,483</td><td>2,202,237</td><td>2,192,956</td><td>2.173.378</td><td>2.189.693</td><td>2.179.331</td><td>2.206.010</td><td>2 186 430</td><td>2 215 800</td><td>2 224 687</td><td>7 242 828</td></th<>		2,199,483	2,202,237	2,192,956	2.173.378	2.189.693	2.179.331	2.206.010	2 186 430	2 215 800	2 224 687	7 242 828
2011         2012         2013         2014         2015         2016         2011         2012         2019         2019           8.20%         6.30%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         6.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%         7.10%		7.884	2,906	7.884	7.884	7 884	40,0	7 884	2,780	9,790	4,784	8,760
2011         2012         2013         2014         2014         2015         2016         2017         2018         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019         2019 <th< td=""><th></th><td>0.760</td><td>20,0</td><td>207.0</td><td>00.0</td><td>4.36%</td><td>4.00%</td><td>% L.C.</td><td>14.44%</td><td>0.44%</td><td>15.78%</td><td>75.33%</td></th<>		0.760	20,0	207.0	00.0	4.36%	4.00%	% L.C.	14.44%	0.44%	15.78%	75.33%
2011 2012 2013 2014 2015 2016 2017 2018 2019 63,20% 67,30% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00% 67,00%		74 89%	74 78%	74 67%	24 00%	74 669	90.00%	90.00%	90.00%	30.00%	90.00%	90.00%
2011 2012 2013 2014 2015 2016 2017 2018 2019 68.20% 67.10% 66.80% 67.20% 67.30%		77.34%	87.78%	87.78%	87.78%	88.03%	81.78%	77.10%	81.78%	88.03%	87.78%	87.78%
2014 2017 2018 2014 2015 2016 2017 2018 2019		67.40%	67.30%	67.20%	66.80%	67.10%	86.60%	67.60%	67.00%	%06.79	68.20%	67.80%
		2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010

	Unit 1 Dispatch Information:	January-01	February-01	March-01	April-01	May-01	June-01	July-01
	House Available for Diepatch	744	672	240	720	4	720	4
	Hours Available for Disparcin	,000	/00000	400 000	400 00%	400 00%	100 00%	100.00%
_	Percentage of Hours Dispatched	100.00%	100.00%	200.001	00.00	0.00	2000	, , ,
_	Average Dispatched Load	95.00%	95.00%	95.00%	95.00%	92.00%	95.00%	95.00%
_	Eisel Eired fons/hr	105.86	195.86	195.86	195.86	195.86	195.86	195.86
_	2	445 740	124 846	47 006	141 018	145.718	141.018	145,718
_	SIO	2,0	200			9000	7 756	0.045
	Total Ash (100% up)- tons	8,015	7,239	2,585	90,'	8,U13	00/1	0,0
	Total I impetone (100% up). tons	2,160	1.951	697	2,090	2,160	2,090	2,160
	Total Fivash/Limestone Load- tons	10.174	9,189	3,282	9,864	10,174	9,846	10,174
	Heat Rate Information:							
	Grand Gonomation	263 304 377	237 820 598	84.935.928	254.807.784	263.301.377	254,807,784	263,301,377
-	TOTAL OF CALL STREET	0.400	9080	9 408	9.408	9.408	9.408	9,408
-	UNIT 1 Gross Heat Rate- DI U/KWIII.	0,400	001.0	2000	940 001 000	240 040 004	240 702 256	248 849 804
_	Net Generation	248,819,801	224,740,465	80,264,452	240,/93,356	740,619,001	240,793,330	240,013,001
_	Plant Net Heat Rate- BTU/kWh:	9,956	9,956	9,956	9,956	9,956	9,956	9,956
- 79	Unit 1 Dispatch Information:	January-02	February-02	March-02	April-02	May-02	June-02	July-02
_	House Available for Dispatch	744	672	240	720	4	720	4
,	podotoro of canal to contract of	7000	03 00%	94 00%	%00.76	95.00%	92.00%	%00'96
_	Percentage of nours Dispatched	93.00%	2000	2000	%00 80	%UU 86	%00 66	100.00%
-	Average Dispatched Load	98.00%	98.00%	97.00%	90.00	90.00	2000	00 000
	Fuel Fired tons/hr	202.48	202.48	200.27	202.48	202.48	204.89	700.30
		140.097	126,539	45,180	137,035	143,110	140,006	147,777
	Total Ach (100% up)- tons	7.705	6.960	2.485	7,537	7,871	7,700	8,128
	Total 1 impetons (100% up), tons	2 2 3 2	2 0 16	712	2,160	2,232	2,184	2,281
÷	Total Elvash/l imestone Load- tons	9,938	8.976	3,197	9,697	10,104	9,884	10,409
	Heat Rate Information:	<u> </u>						
	Gross Generation	252,603,026	228.157.572	81.520,610	247,083,085	258,035,349	252,259,706	266,072,970
	The state of the Date of the D	9.428	9.428	9.422		9,428	9,435	9,442
	Ollit I Gloss Heat Nate Ceneration	238,709,860	215,608,906	77,036,976	233,493,515	243,843,405	238,385,422	251,438,957
	Direct Not Doot Date Bath BTI I/kWh	7.26	9.977	9.970	9,977	9,977	9,984	9,991

FIG. 57

# Unit 1 Gross Capacity:

373

1007	88.03%		00	2,350.29	1,617,002	88,935	22 OR4	140,000	112,699	2,921,795,923	9,408	2,761,097,147	9,956	2002	77.10%			7,440.77	1,395,919	76,776	C88,17	98,661	2,515,870,136	9,432	2,377,497,279	9,981
	Gross Capacity Factor:			Fuel Fired tons/nr	tons	Total Ash (100% up)- tons	Total limited one	Oral Lilliestolle- tolls	Total Flyash/Limestone Load- tons	Gross Generation	Unit 1 Gross Heat Rate- BTU/kWh:	Net Generation	Plant Net Heat Rate- BTU/kWh:	1	Gross Capacity Factor:			Fuel Fired tons/nr	tons	Total Ash (100% up)- tons	Total Limestone- tons	Total Flyash/Limestone Load-tons	Gross Generation	Unit 1 Gross Heat Rate- BTU/kWh:	Net Generation	Plant Net Heat Rate- BTU/kWh:
December-01	4	100.00%	92.00%	195.86	145.718	8 0 15	000	2,160	10,174	263,301,377	9.408	248 819 801	9,956	December-02	744	94.00%	%00.86	202.48	141,603	7,788	2,232	10,021	255,319,188	9,428	241,276,632	9,977
November-01	720	100.00%	<b>32.00%</b>	195.86	141.018	7.756	3	2,090	9,846	254.807.784	9.408	240 702 25G	9,956	November-02	456	94.00%	98.00%	202.48	86,789	4,773	1,368	6,142	156,485,954	9.428	147.879.226	7.26
October-01	44	100.00%	95.00%	195.86	145 718	9 9 4 5	0,0	2,160	10,174	263 304 377	9.408	240 040 004	9,956	October-02	0	92.00%	98.00%	202.48	•	0	0	0	•	#DIV/0i	0	#DIV/0!
September-01	720	100.00%	95.00%	195.86	141 018	1 1	00/,	2,090	9,846	254 907 784	907.00	010 000	9,956	September-02	720	95.00%	%00'66	204.89	140.006	7.700	2.184	9,884	252,259,706	9.435	238 385 422	9,934
August-01	447	100.00%	95.00%	195 RG	444 040	2 1	96/'	2,090	9,846	254 907 794	407,100,104	010 001 010	240,793,356 9,956	August-02	744	%00.96	100.00%	206.90	147.777	8.128	2,281	10,409	266 072 970	0.442	251 438 957	9,991

FIG. 58

11 12 F. L. Achter Leavening Common Of Echnison, 03 March 03 April 03	January-05 repluary-00 minus	Hours Available for Dispatch 744 672 240 720	Bosconstant of Hours Dispatched of 04 00% 94.00% 94.00%	%UU 26 700%	Heu Load 90,00 % 90,00 %	77.007	tons 140,097 126,539 45,180 137,035	7 705 6.960	2 2 2 2 0 16 712	0 0 3 8 9 7 8 3.197	Gross Generation 252,603,026 228,157,572 81,520,610 247,083,085	0.428	22 370 360 27 308 306 77 036 376 23	9,977 9,970	Ilmit 4 Dispatch Information: January,04 February,04 March-04 April-04	744 696 240	97 00% 94.00%	90.00% 08.00% 07.00%	toucht 200 48 200 27	440 007 424 058 45 180	7.00 2.485	27.7	2,522 2,000	9,938 9,29/ 3,19/		252,603,026 236,306,057 81,520,010	9,422	Net Generation 238,709,860 223,309,224 77,036,976 233,493,515
3 Mav-03								7,871	2,232	10,104	185 258,035,349	9,428	2		4 May-04		6			5 143.110					10F 2E9 025 240			515 245,645,405
June-03	730	9	95.00%	%00'66	204.89	7 40 000	140,006	2,700	2,184	9,884	252,259,706	9,435	238,385,422	9,984	June-04	720	95.00%	%00.66	204.89	140,006	7.700	2.184	0 884	6	252 259 706	0.435	3,430	220,000,422
July-03	744	Į	96.00%	100.00%	206.90	447 777	141,14	8,128	2,281	10,409	266,072,970	9,442	251,438,957	9,991	July-04	744	<b>%00'96</b>	100.00%	206.90	147,777	8,128	2,281	10.409		266.072.970	0.442	254 430 057	201,430,0

FIG. 59

2003				2,440.77	1,589,275			tons 112,321	2,8		2,70	Wh: 9,981	2004				2,440.77				tons 112,321	ition 2,864,502,616		ition 2,706,954,973	:Wh: 9,981
	Gross Capacity Factor:			Fuel Fired tons/hr	tons	Total Ash (100% up)- tons	Total Limestone- tons	Total Flyash/Limestone Load- tons	Gross Generation	Unit 1 Gross Heat Rate- BTU/kWh	Net Generation	Plant Net Heat Rate- BTU/kWh:		Gross Capacity Factor:			Fuel Fired tons/nr	suot	Total Ash (100% up)- tons	Total Limestone- tons	Total Flyash/Limestone Load- tons	Gross Generation	Unit 1 Gross Heat Rate- BTU/kWh:	Net Generation	Plant Net Heat Rate- BTU/kWh:
December-03	744	94.00%	%00.86	202.48	141,603	7.788	2,232	10,021	255,319,188	9,428	241,276,632	9,977	December-04	744	94.00%	%00.86	202.48	141,603	7,788	2,232	10,021	255,319,188	9.428	241,276,632	7.266
November-03	720	94.00%	%00.86	202.48	137,035	7.537	2.160	9,697	247,083,085	9,428	233,493,515	9,977	November-04	720	94.00%	%00'86	202.48	137,035	7,537	2,160	9,697	247.083.085	9.428	233,493,515	9,977
October-03	44	95.00%	%00'86	202.48	143.110	7.87	2 232	10,104	258,035,349	9.428	243,843,405	9,977	October-04	744	95.00%	98.00%	202.48	143,110	7.871	2,232	10,104	258.035.349	9.428	243 843 405	7266
September-03	720	95.00%	%00.66	204.89	140 006	7 700	2 184	9,884	252,259,706	9.435	238,385,422	9,934	September-04	720	95.00%	%00.66	204,89	140.006	7.700	2,184	9,884	252 259 706	0.435	238 385 422	9.934
August-03	744	%00'96	100.00%	206 90	147 777	8 128	2 204	10,409	266.072.970	9.442	251 438 957	9,991	Andust-04	744	%00.96	100.00%	206.90	147.777	8 128	2,281	10,409	070 070 990	0.442	351 438 057	9.991

FIG. 60

240         720         744         720         744           94,00%         94,00%         95,00%         95,00%         96,00%           200.27         202.48         20,489         20,690           45,160         137,035         143,110         140,006         147,777           2,485         7,537         7,871         7,700         8,128           712         2,160         2,222         2,184         2,281           3,197         9,697         10,104         9,884         10,409           81,520,610         24,288         28,835,349         252,259,706         266,072,970           9,422         9,428         9,428         9,432         9,442         9,891           77,086,876         234,834,515         248,445,405         28,385,252,251,706         286,072,970           9,877         9,977         9,977         9,994         9,994	Init 1 Dienatch Information: Jan
94.00% 95.00% 95.00% 98.00% 98.00% 98.00% 98.00% 99.00% 30.048 202.48 202.48 24.89 24.89 24.89 24.32 2.184 9.687 10.104 9.884 9.428 24.368 25.3349.365.249 25.259.706 9.377 9.977 9.984	January-05   epider y 50
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98.00% 98.00% 99.00% 202.48 204.89 137,035 143,110 140,006 7,537 7,871 7,700 2,160 2,232 2,184 9,687 10,104 9,884 24,385,349,385,233,493,515 243,843,405 233,493,515 243,843,405 233,493,517 9,977 9,984	
202.48 202.48 204.89 137,035 143,110 140,006 7,537 7,811 7,700 2,160 2,232 2,184 9,697 10,104 9,884 247,083,085 286,035,349 252,259,706 9,428 9,428 9,435 9,428 243,440,5 288,385,443 9,977 9,984	
137,035 143,110 140,006 2,160 2,222 2,184 9,697 10,104 9,884 247,083,085 288,035,349 252,289,706 9,428 9,428 9,435 9,428 233,493,515 243,495 288,385,435 9,577 9,977 9,984	202 48 2
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247,083,085 258,035,349 252,293,109 9,426 9,428 9,435 233,493,515 243,843,405 238,385,425 9,377 9,984	
9,428 9,425 233,493,515 243,843,405 238,385,422 9,977 9,977	252,603,026 228,15
233,493,515 243,843,405 238,385,42: 9,977 9,977 9,977	9,428 9,42
9.977 9.977 9,984	238,709,860 215,608,906
	9,977 9,97

FIG. 61

2005	20.00		-	2,440.77	1,589,275	87,410	24,910	112.321		2,864,502,616	9,432	2,706,954,973	9,981
Control Control	Gross capacity ractor.			Fuel Fired tons/hr	tons	Total Ash (100% up)- tons	Total Limestone- tons	Total Flyash/Limestone Load- tons		Gross Generation	Unit 1 Gross Heat Rate- BTU/kWh:	Net Generation	Plant Net Heat Rate- BTU/kWh:
5 December-05	<b>‡</b>	94,00%	%00'86	202.48	141,603	7,788	2.232	10.02	196	255,319,188	9.428	241.276.632	7.266
November-0	720	94.00%	%00'86	202.48	137.035	7,537	2,160	0.607	9,031	247.083.085	9.428	233.493.515	9,977
October-05	4	95.00%	%00'86	202.48	143.110	7.871	2 232	70707	6, 0	258 035 349	9.428	243 843 405	9.977
September-05	720	95.00%	%00.66	204,89	140.006	7 700	2 184	î	9,884	252 259 706	9.435	228 385 422	9.934
August-05	4	%00.96	100.00%	206.90	147 777	8 128	2 284	207.07	10,409	046 072 970	0.442	254 428 057	9.991

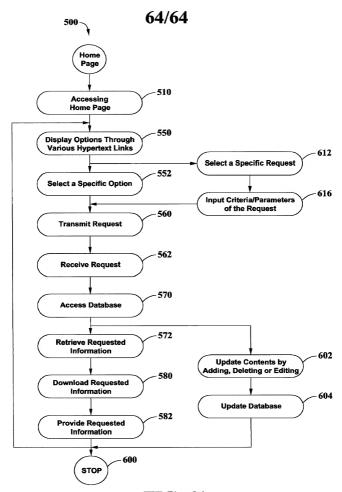
t9/79

FIG. 62

Assumed Tax (per ton of Carbon)	\$40	
		Sub-
		Bituminous
Facility Net Heat Rate (HHV):	BTU/KWH	9,956
HHV of Coal:	BTU/#	8,500
Percent Carbon in Coal (WT)		48.30%
Unit Capacity:	MW	373
Carbon Loss:		0.25%
Molecular Weight of Carbon		12.01
Molecular Weight of O2		32.00
Price per MMBtu from Coal		1.11
Price per Ton of Coal (delivered)	per Ton	\$30.00
Net KWH Produced:		2,761,097,147
Coal Fired	Tons	1,617,002
Carbon in Flue Gas	Tons	781,012
CO2	Tons	2,861,804
Fuel Cost:	Total	\$48,631,344
	\$/kwh	\$0.0176
	Carbon Tax:	\$31,240,484
	per KWH	\$0.0113
	ner MMRtu	\$1.14

Tons CO2/kWh

0.001036473



**FIG. 64**